

## Assignment 1

[1pt] 1. When are assignments due?

[1pt] 2. What file formats are acceptable for assignments?

[1pt] 3. What is the minimum score you can get on the final exam and still pass the class?

[1pt] 4. Compute the linear combination

$$3(-1 + x + 3x^2 - 5x^3) + 7(3 - 4x - x^2 + 4x^3)$$

[3pt] 5. Show that  $1 + 6x + 5x^2 + x^3$  is in the span of

$$\{1 + 2x + x^2 - 2x^3, x + 4x^2, 3 + 4x - x^2 - 7x^3\}$$

[3pt] 6. Show that the set  $\{1 + 5x + 3x^2, -2 - 7x - 5x^2, 2 + 4x + x^2\}$  is linearly independent.